

Level 1 Validation Certificate



This document verifies that the Level 1 Validation process was completed. The session details and audit review outcomes are included here.

This certificate is required for submission – alongside the Level 1 validated water audit software file – to the California Department of Water Resources.

Call Date: 9/10/2020

Water Supplier

Supplier Name: City of Orange

Supplier Participants: Tuan Cao

Key Audit Metrics

Data Validity Score:	74
ILI:	1.80
Real Loss:	34.10 gal / conn / day
Apparent Loss:	18.85 gal / conn / day
Non-Revenue Water as Percent of Cost of Operating System:	6.1%

Validator

Validator: Kim Manago,
Water Systems Optimization

Validator Qualifications: Water Audit Validator Certificate from
the AWWA California Nevada Section

Certification Statement by Validator

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit. ☒

If not, rejected recommendations are included here.

Level 1 Validation – Water Supplier Confirmation

This document confirms participation in and endorsement of the Level 1 Validation as completed.

This acknowledgement is required for submission – alongside your Level 1 validated water audit software file – to the California Department of Water Resources.

Water Supplier Name:

City of Orange

Water Supplier Public Water System ID:

3010027

Water Audit Period:

Calendar Year 2019

Water Audit & Water Loss Improvement Steps

Steps taken in the audit period timeframe to increase data source accuracy, reduce real losses, and/or reduce apparent losses, as informed by the water audit.

The City of Orange Water Division has developed and completed 30 miles of leak detection survey in April – May, 2020. The program will be continue in 2021 and will survey another 30 miles of water mains. Another critical project is the study and upgrade of the existing SCADA system which is expected to be completed in mid 2021.

Certification Statement by Water Supplier Executive:

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audits and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

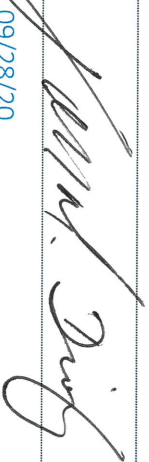
Executive Name (print):

Jose M. Diaz

Executive Position:

Water Manager

Signature:



Date

09/28/20